

Quantitative Methods

“Quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques. Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon.”

- Babbie, Earl R. *The Practice of Social Research*. 12th ed. Belmont, CA: Wadsworth Cengage, 2010;
- Muijs, Daniel. *Doing Quantitative Research in Education with SPSS*. 2nd edition. London: SAGE Publications, 2010.

Essentially, your methods section explains to the reader both *how* your study was conducted and *why* you chose to conduct it that way.

Participants/Subjects - the people that the research focuses on

- Used to give context
- Helps to diverge different populations by allowing for trends to appear based on different characteristics
- Identifies limitations

Procedure - the ways in which data is collected

Quantitative:

- Every step you took
- Data collection
- Calculations
- Trend identification
- Manipulation of data
- Data representation

Possible subsections:

- Data analysis
- Visual representations
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Instruments

Quantitative: Used to collect numerical data to be analyzed.

Ex: Survey, Questionnaire, Physical instruments, etc.

Design - the type of paper and data collection

- “This study aims to... using a _____ research design.”
- Experimental vs. non-experimental

Ex.

- Correlational analysis
- Cause & effect (experimental)
- Causal-comparative/Quasi-experimental (non-experimental)

****ALL SECTIONS:** Defending *why* you chose **each part** of your method is a very important part of this section! For example, in the case of participants, if you chose to include high school females only, explain why this would be beneficial to your results. Also consider including parts of your method that are intentionally *discarded*. (ex. “I chose *not* to _____ because...”)